

Learning to Fly: The Wright Brother's Adventure			
2005 Mathematics			
Learning Standards			
District of Columbia Mathematics			
Grade 6			
Activity/Lesson	State	Standards	
New Data	DC	MA.6.NSO-N.3	Know that numbers and their opposites add to 0 and are on opposite sides and at equal distance from 0 on a number line; know that 0 is an integer that is neither negative nor positive.
1902: Success at Last	DC	MA.6.NSO-N.3	Know that numbers and their opposites add to 0 and are on opposite sides and at equal distance from 0 on a number line; know that 0 is an integer that is neither negative nor positive.
1902: Success at Last	DC	MA.6.NSO-N.5	Identify and determine common equivalent fractions, mixed numbers, decimals, and percentages.
1902: Success at Last	DC	MA.6.NSO-C.8	Select and use appropriate operations to solve problems involving addition, subtraction, multiplication, division, and positive integer exponents with whole numbers and with positive fractions, mixed numbers, decimals, and percentages.
1902: Success at Last	DC	MA.6.NSO-C.13	Calculate given percentages of quantities, and solve problems involving discounts at sales, interest earned, and tips.
1902: Success at Last	DC	MA.6.NSO-E.18	Estimate results of computations with whole numbers and with positive fractions, mixed numbers, decimals, and percentages. Determine reasonableness of estimates.
1902: Success at Last	DC	MA.6.G.5	Find the distance between two points on horizontal or vertical number lines.
1902: Success at Last	DC	MA.6.M.1	Differentiate between and use appropriate units of measures for two- and three-dimensional objects (i.e., when finding perimeter, area, and volume).
1902: Success at Last	DC	MA.6.DASP.1	Describe and compare data sets using the concepts of median, mean, mode, maximum and minimum, and range.
1903: Powered Flight	DC	MA.6.NSO-N.3	Know that numbers and their opposites add to 0 and are on opposite sides and at equal distance from 0 on a number line; know that 0 is an integer that is neither negative nor positive.
1903: Powered Flight	DC	MA.6.NSO-C.10	Accurately and efficiently add, subtract, multiply, and divide (with multidigit divisors) whole numbers and positive decimals.

1903: Powered Flight	DC	MA.6.NSO-E.18	Estimate results of computations with whole numbers and with positive fractions, mixed numbers, decimals, and percentages. Determine reasonableness of estimates.
1903: Powered Flight	DC	MA.6.PRA.8	Recognize when information given in a table, graph, or formula suggests a proportional or linear relationship.
1903: Powered Flight	DC	MA.6.PRA.9	Produce and interpret graphs that represent the relationship between two variables (x and y) in everyday situations.
1903: Powered Flight	DC	MA.6.G.5	Find the distance between two points on horizontal or vertical number lines.
1903: Powered Flight	DC	MA.6.M.4	Solve problems involving proportional relationships and units of measurement (e.g., same system unit conversions, scale models, maps, and speed).
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2005 Mathematics			
Learning Standards			
District of Columbia Mathematics			
Grade 7			
Activity/Lesson	State	Standards	
1900: Kitty Hawks	DC	MA.7.M.4	Construct and read drawings and models made to scale.
1901: The First Improvement	DC	MA.7.M.4	Construct and read drawings and models made to scale.
1902: Success at Last	DC	MA.7.NSO-N.1	Compare, order, estimate, and translate among integers, fractions, mixed numbers (i.e., rational numbers), decimals, and percents.
1902: Success at Last	DC	MA.7.NSO-C.10	Compute with fractions (including simplification of fractions), integers, decimals, and percentages (including those greater than 100 and less than 1) using the four operations and combinations of the four operations.
1902: Success at Last	DC	MA.7.NSO-C.13	Calculate the percentage increase and decrease of a quantity.
1903: Powered Flight	DC	MA.7.NSO-N.1	Compare, order, estimate, and translate among integers, fractions, mixed numbers (i.e., rational numbers), decimals, and percents.
1903: Powered Flight	DC	MA.7.NSO-C.12	Select and use appropriate operations — addition, subtraction, multiplication, division — to solve problems with rational numbers and negative integers.
1903: Powered Flight	DC	MA.7.NSO-E.20	Estimate results of computations with rational numbers; determine estimates to a certain stated accuracy.

1903: Powered Flight	DC	MA.7.PRA.1	Extend, represent, analyze, and generalize a variety of patterns with tables, graphs, words, and, when possible, symbolic expressions. Include arithmetic and geometric progressions (e.g., compounding).
1903: Powered Flight	DC	MA.7.M.3	Demonstrate an understanding that rate is a measure of one quantity per unit value of another quantity; use models, graphs, and formulas to solve simple problems involving rates (e.g., velocity and density); check the units of the solutions; use dimensional analysis to check the reasonableness of the answer.
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2005 Mathematics			
Learning Standards			
District of Columbia Mathematics			
Grade 8			
Activity/Lesson	State	Standards	
New Data	DC	MA.8.NSO-N.3	Know that the absolute value is the distance of the number from 0; determine the absolute value and additive inverse of real numbers; determine the absolute value of rational numbers.
New Data	DC	MA.8.G.6	Find the distance between two points on the coordinate plane using the distance formula; find the midpoint of the line segment; recognize that the distance formula is an application of the Pythagorean theorem.
1902: Success at Last	DC	MA.8.NSO-N.3	Know that the absolute value is the distance of the number from 0; determine the absolute value and additive inverse of real numbers; determine the absolute value of rational numbers.
1902: Success at Last	DC	MA.8.G.6	Find the distance between two points on the coordinate plane using the distance formula; find the midpoint of the line segment; recognize that the distance formula is an application of the Pythagorean theorem.
1903: Powered Flight	DC	MA.8.NSO-N.3	Know that the absolute value is the distance of the number from 0; determine the absolute value and additive inverse of real numbers; determine the absolute value of rational numbers.

1903: Powered Flight	DC	MA.8.NSO-E.16	Estimate and solve problems with square roots; find square roots of perfect squares and approximate the square roots of nonperfect squares by locating them between consecutive integers.
1903: Powered Flight	DC	MA.8.NSO-E.17	Determine estimates to a certain stated accuracy.
1903: Powered Flight	DC	MA.8.PRA.1	Use tables and graphs to represent and compare linear growth patterns. In particular, compare rates of change and x- and y-intercepts of different linear patterns.
1903: Powered Flight	DC	MA.8.G.6	Find the distance between two points on the coordinate plane using the distance formula; find the midpoint of the line segment; recognize that the distance formula is an application of the Pythagorean theorem.
1903: Powered Flight	DC	MA.8.DASP.5	Select, create, interpret, and use various tabular and graphical representations of data; differentiate between continuous and discrete data and ways to represent them.
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2005 Mathematics			
Learning Standards			
District of Columbia Mathematics			
Grades 9-12 (Algebra I)			
Activity/Lesson	State	Standards	
1902: Success at Last	DC	MA.AI.N.3	Calculate and apply ratios, proportions, rates, and percentages to solve a range of consumer and practical problems.
1902: Success at Last	DC	MA.AI.D.1	Select, create, and interpret an appropriate graphical representation (e.g., scatter plot, table, stem-and-leaf plots, circle graph, line graph, and line plot) for a set of data, and use appropriate statistics (e.g., mean, median, range, and mode) to communicate information about the data. Use these notions to compare different sets of data.
1903: Powered Flight	DC	MA.AI.N.4	Use estimation to judge the reasonableness of results of computations and of solutions to problems involving real numbers, including approximate error in measurement and the approximate value of square roots. (Reminder: This is without the use of calculators.)